

Necessity of Environmental Education in Iranian Universities (Case Study: University of Tehran)

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Abstract— Environmental education and public awareness especially in developing countries is a way to conserve environment and natural resources and to decline development impacts. In this paper 300 students of B.Sc., M.Sc. and Ph.D. of University of Tehran were be asked. In every group, number of males and females were equal. After collection of questionnaires, the data were analyzed in Excel software. The results show that %21 of students don't attend to the environment. Also %95 of students are interested in Ecotourism. According to the results, %88 of students alert others to conserve the environment. The results show that only %15 of students have a satisfactory level of environmental knowledge. Also only %18 of students always follow environmental News. TV and Radio are sources of environmental News of %54 of students. %39 of students use Internet to follow environmental News. Newspapers and magazines are choices of %6 of students. Also %1 of students are aware of environmental news through posters and brochures. %50 of students said that don't have any lesson that associates to the environment in the university. According to the results %75 of students are agree with taking part in environmental courses. The results show that %53 of students are agree with passing environmental acquaintance lesson. The results show that female students have better results in 6 index(attention to environment, membership in NGOs ,interested in Ecotourism, Environmental knowledge, be agree with passing environmental acquaintance and be agree with passing environmental courses). But male students follow environmental News more than female students. Also Ph.D. and M.Sc. students have better results in whole of indexes in comparison to B.Sc. students. So To have an environmentally developed country it is necessary to extent environmental education programs in the universities especially for male and B.Sc. students

Index Terms— Environmental Development, Environmental Education, Higher Education, Sustainable Development.

1 INTRODUCTION

In recent decade, human activities have endangered environment and natural resources. So it caused to irreparable effects on environment (Bonnet, 2004). As these effects increase, necessity of environmental education increases. Environmental education and public awareness especially in developing countries is a way to conserve environment and natural resources and to decline development impacts (Brennan, 1994). When every citizen be aware of the importance of conservation of environment, Legislators will be able to plan for a sustainable developed society (Thomas, 1992). The lack of public cooperation will result in failure of environmental governance projects (Nath, 2003).

Environmental education means identifying values and describing concepts to create skills for understanding the relationship between human, culture and environment (IUCN, 1970). Environmental education should create a comprehensive knowledge that include social science and natural science and also makes interaction between natural resources, human resources, development and environment. Environmental education should be a part of all of majors and education programs (WCED, 1987).

UNESCO held a conference about biosphere in Paris in 1968. after this, IUCN said about this conference: "perhaps this is the first time that world attends to environmental education" (Palmer, 1998). Human environment and development conference of UN in 1972

in Sweden was the first effort of 113 countries to emphasis the role of education and public awareness about environmental issues (Huckle, 1991). After this conference the first environmental education workshop held in Yugoslavia in 1975 to determine basics of environmental education global program. In 1977 international convention for environmental education formed in Georgia (Schoenfeld, 1979). in 1992 environment and development conference in Brazil ended in Agenda 21. agenda 21 was the start line for countries to reform public insight about environment and nature through environmental education (Corcoran, 1994).

Environmental education was started in the USA since 1890. in Canada educational planners focus on environmental education for citizens (Wolf, 2001). In England environmental education was started since 1965 and since 1975 in Australia. Australian association for environmental education was opened since 1980 and now it has more than 500 members (Tilbury & Henderson, 2003). In China environmental education institutes were activated since 1970 (Kohlstedt, 1997). in Russia all of the higher education institutes attend to environmental education. In these institutions, environmental lectures offer in several levels (Elam & Bertilsson, 2003). Since 1992 environmental education entered to South African textbooks. In recent year environmental education in Spanish universities has increased (Palmer, 1998).

4th development program of Iran have addressed envi-

ronmental education in 60th and 64th articles (Mohar-ramnezhad & Heidary, 2006). Part A of 64th article discussed about improvement of public awareness to achieve environmental sustainable development. Therefore Iranian environmental conservation office requested the ministers’ summit to recognize this law. Fortunately Iranian government recognized it and sent it to the ministries and organizations in 2006.

This is obvious that environmental education will result in improvement of environmental ethics in the society if this program is based on the researches (Sharren, 2006). Iranian universities and higher education institutes is one of the responsible of researches in country. But there aren’t sufficient researches about environmental education in Iran and it doesn’t have satisfactory place in the universities. Universities don’t attend to improvement environmental ethics. Graduated students don’t have least environmental skills (Kuchpideh et al., 2008).

The most important actions for environmental education in Iran are: Some universities performed “green university program” and presented several environmental programs. Also Environmental conservation office with cooperation of ministry of science and technology performed “green education program” to improve environmental knowledge of the students. And fortunately some universities offer environmental acquaintance lesson. And the best action is that cooperation between universities and environmental conservation office have increased in recent years.

2 MATERIALS AND METHODS

In this research first of all we reviewed governmental regulations and laws about environmental education, and then prepared a questionnaire that contains 40 questions. The questionnaire was designed in Open (Free) model. Our goal was to find satisfactory answers to the following questions.300 students of University of Tehran were chosen to answer the questions. They were B.Sc., M.Sc. and Ph.D. students. The number of males and females was equal.

3 RESULTS

After collecting of the questionnaires, the data analyz-e in Excel software.

3-1-Do you attend to the environment in your routines ?

Five questions were designed to survey this item. After preparing follow table, the charts drew.

Sum of idealistic answers	Level
4-5	Advanced
2-3	Intermediate
0-1	Beginner

Table1. Level of attention to the environment.

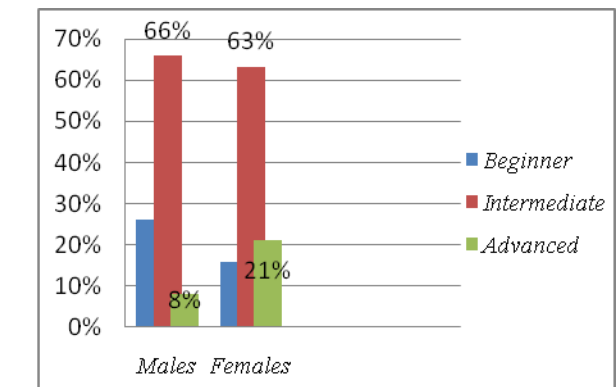
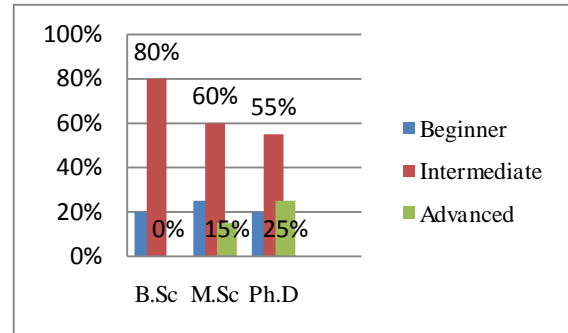


Fig1. Measurement of attention to the environment.

3-2- Are you a member of environmental NGOs?

Chart of this question is followed:

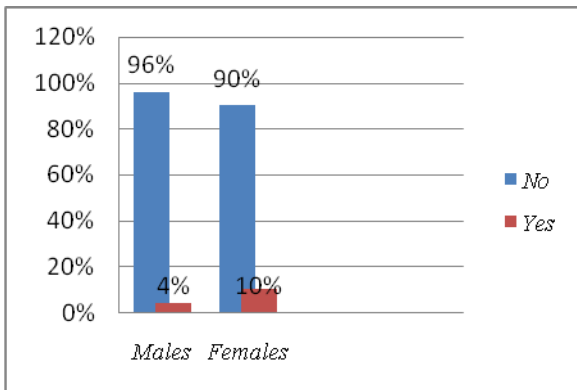
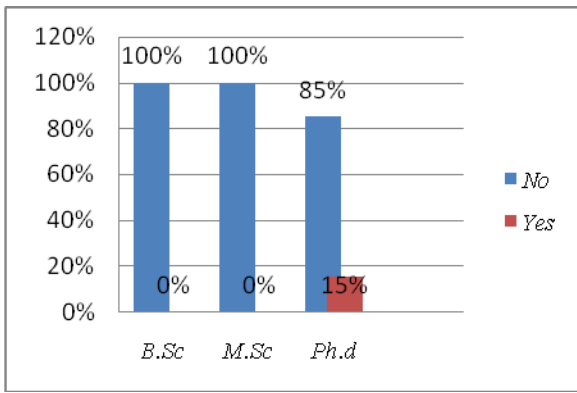


Fig2.Membership in environmental NGOs.

3-3-Are you interested in Ecotourism?

After collecting the data, charts draw.

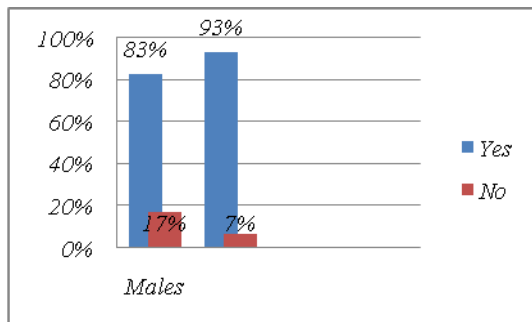
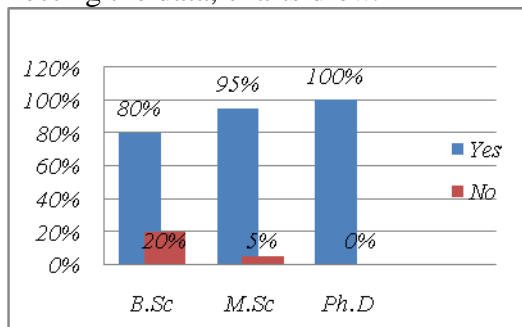


Fig3. Interested in Ecotourism.

3-4-Do you alert others to conserve environment?

Charts of this question are drawn below:

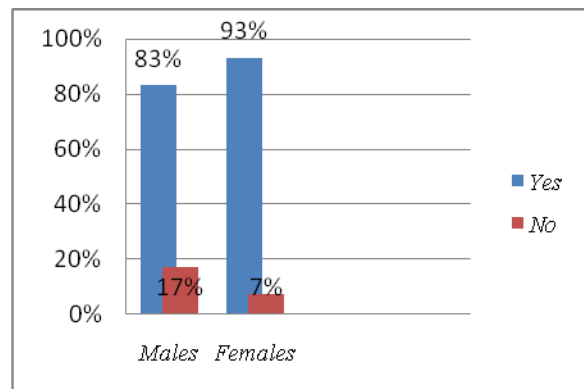
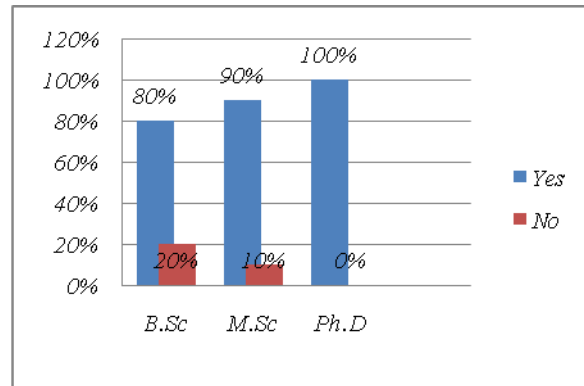


Fig4. Alerting to others to conserve the environment.

3-5-What is his/her environmental knowledge level?

18 questions were prepared to survey this index, then following table designed and at the end charts draw.

Sum of correct answers	Level
12-18	Advanced
7-11	Intermediate
0-6	Beginner

Table2. Index for Level of environmental knowledge.

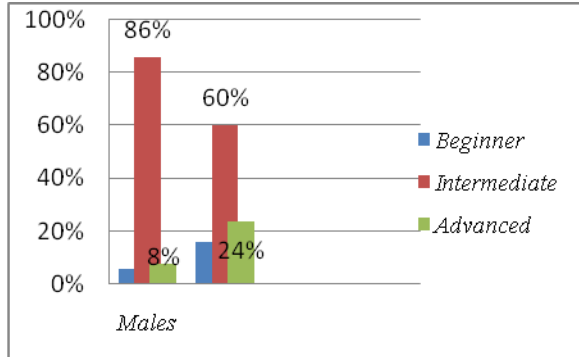
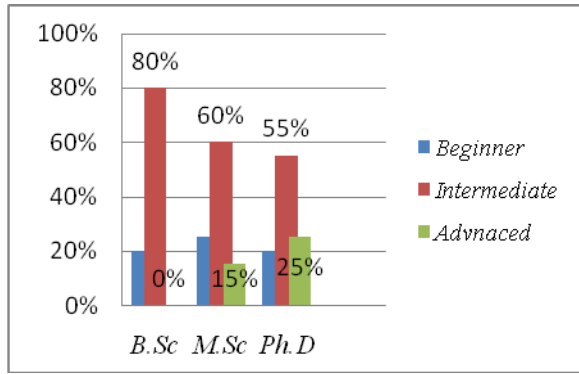


Fig5. Level of environmental knowledge.

3-6-Do you follow environmental News?

5 questions were designed to discuss this question, also 5 other questions were prepared to control the answers, then following table designed and at the end the charts drew.

Sum of idealistic answers	Level
4-5	Always
2-3	Usually
0-1	Sometimes

Table3.Levels of following environmental News.

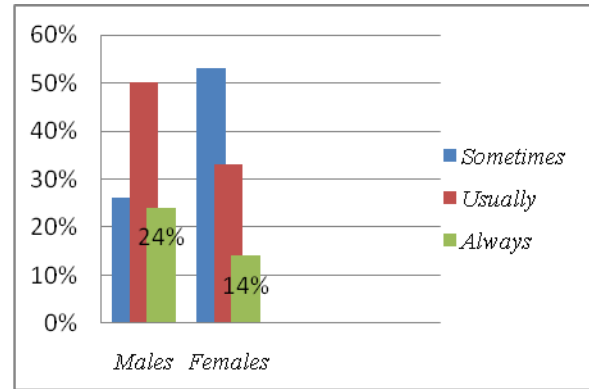
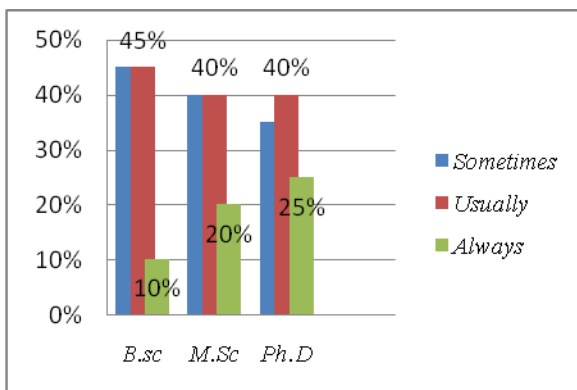


Fig6.Follow environmental News

3-7-What is source of your environmental News?

To survey this question, 4 options were obtained (TV and Radio (T, R), Internet (I), Newspaper and Magazine (N, M), Poster and Brochure (P, B)).

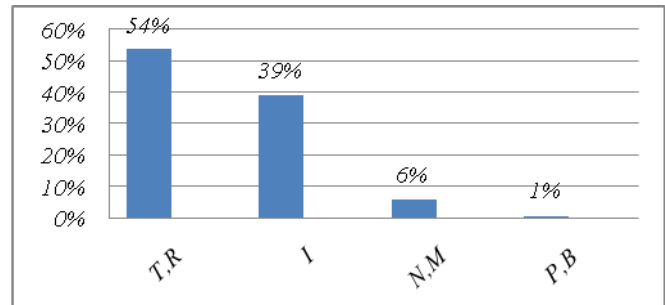


Fig7.Source of environmental News

3-8-Do you have any lesson associated with environment in the university?

Charts of this question are following:

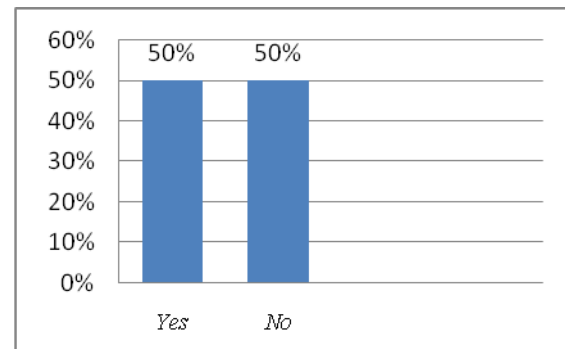


Fig8.Lesson associates to the environment.

3-9-Do you agree with passing environment acquaintance in the university?

After collecting the answers, charts drew:

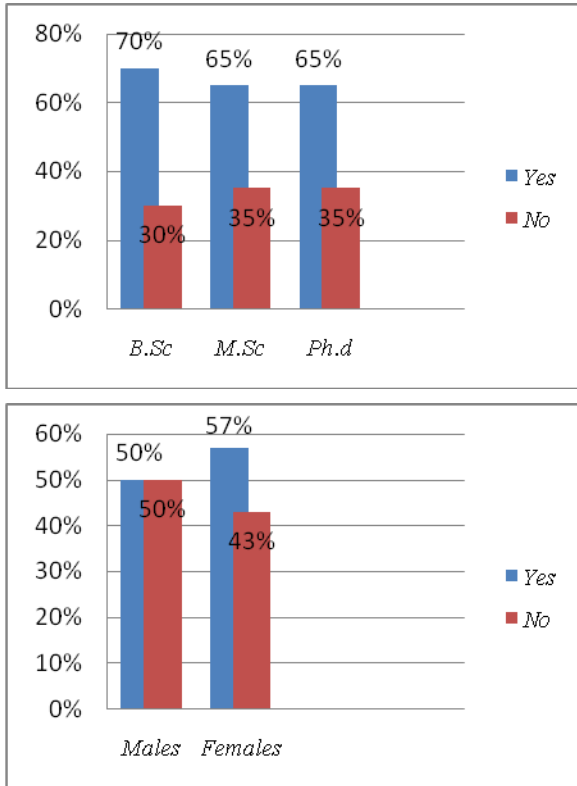


Fig9. Agreement with passing environmental acquaintance.

3-10-Do you agree with taking part in environmental courses?

Chart of this question is showed below:

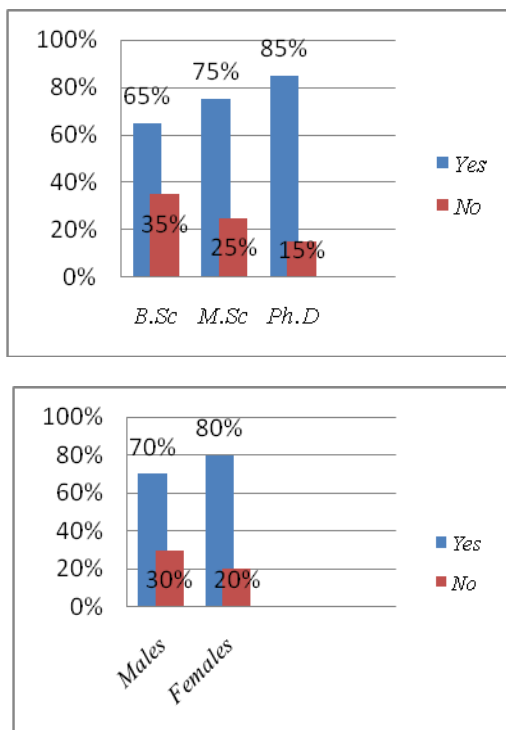


Fig10. Agreement with taking part in environmental courses.

4 CONCLUSION

The results show that %21 of students don't attend to the environment. Female students attend to the environment more than the males. Also when education level of students increases, the level of attention the environment increases. Unfortunately only %6 of students are members of environmental NGOs. Female students are more active in this case. Also higher education students are more active than B.Sc. students. Also %95 of students are interested in Ecotourism. The results show that Ecotourism is more interesting for females and Ph.D. students. According to the results, %88 of students alert others to conserve the environment. Also female students are more active in extension of environmental culture. If degrees of students increase, their environmental responsibility increases. According to the results only %15 of students have a satisfactory level of environmental knowledge. Females' knowledge is more than males and also higher education students have a better level of environmental knowledge than B.Sc. students. The results show that only %18 of students always follow environmental News. But in this case male students are more active than female students. Like other cases, higher education students are more active than B.Sc. students. TV and Radio are sources of environmental News of %54 of students. %39 of students use Internet to follow environmental News. Newspapers and magazines are choices of %6 of students. Also %1 of students are aware of environmental news through posters and brochures. This result that TV has an important role to increase environmental responsibility is similar to results of Palmer and Suggate researches. Also %50 of students said that don't have any lesson that associates to the environment in the university. The results show that %53 of students are agree with passing environmental acquaintance lesson. Females are more interested than males in this case. Like other cases, higher education students are more interested to take part in environmental official education. According to the results %75 of students are agree with taking part in environmental courses. Like previous cases, females are better than males and higher education students are better than undergraduate students. Environmental development depends on environmen-

tal education, because environmental education will improve environmental knowledge, ethics and awareness. To have an environmentally developed country it is necessary to extent environmental education programs in the universities especially for male and B.Sc. students.

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